

CLAIMS

1. An impact head for a guardrail including cable routing means configured to form a tortuous path through which a cable can be threaded.
2. An impact head for a guardrail according to claim 1 wherein the cable
5 routing means includes a member having two or more cable entry ports through which a cable may be threaded.
3. An impact head for a guardrail according to claim 1 or claim 2 which includes one or more cables threaded through the cable routing means.
4. An impact head for a guardrail according to claim 3 wherein the cable
10 routing means is configured so that when a force is applied to the impact head the cables are forced through the cable routing means, such that resistance to cable movement provided by the tortuous cable path limits movement of the impact head caused by the force.
5. An impact head for a guardrail according to claim 3 or claim 4 wherein the
15 cables are under tension.
6. An impact head for a guardrail according to any one of claims 3, 4 and 5 wherein at least one end of the cables is anchored to the ground.
7. An impact head for a guardrail according to claim 6 wherein one end of the
cables is anchored to the ground and the remaining end of the cables is anchored
20 to a rail and/or a support post.
8. An impact head for a guardrail according to claim 7 wherein the impact head is positioned substantially between the two anchor points

9. A guardrail including:

a plurality of support posts,

a plurality of rails slidably interconnected and mounted directly or indirectly to the posts,

5 at least one cable provided along at least a part of the length of the slidably interconnected rails wherein at least one end of the cables is fixed in relation to the ground,

characterised in that it includes an impact head according to any one of claims 1 to 8 positioned at one end of the slidably interconnected rails and through which the
10 cables are threaded.

10. A guardrail according to claim 9 wherein both ends of the cables are fixed in relation to the ground.

11. A guardrail according to claim 9 or claim 10 wherein the end of the cables located farthest from the cable routing means is anchored to a rail and/or a support
15 post.

12. A guardrail including:

a plurality of support posts,

a plurality of rails slidably interconnected and mounted directly or indirectly to the posts,

20 at least one cable provided along at least a part of the length of said slidably interconnected rails wherein each end of the cables is fixed in relation to the ground, and

an impact slider means substantially surrounding a first rail and including a portion which gathers and retains rails during an impact.

13. A guardrail according to claim 12 additionally including an impact head according to any one of claims 1 to 8.

5 14. A guardrail according to claim 12 or claim 13 wherein the cable routing means is mounted on a first post and the impact slider device is attached to the end of a first rail.

15. A guardrail according to claim 14 wherein the impact slider device is adapted so as to be able to slide along a second rail overlapping the end of the first
10 rail.

16. A frangible fastener for use in a guardrail or an impact head for a guardrail according to any one of the preceding claims wherein the frangible fastener includes:

a head portion, a tail portion and a shank portion,

15 wherein the head portion has a minimum cross-sectional diameter greater than the maximum cross-sectional diameter of the tail portion, and

wherein the shank portion includes a frangible zone, having a minimum cross-sectional diameter smaller than the tail portion's maximum cross-sectional diameter.

20 17. An impact head according to any one of claims 1 to 8 which includes one or more frangible fasteners according to claim 16.

18. A guardrail according to any one of claims 9 to 15 which includes one or more frangible fasteners according to claim 16

19. A guardrail according to any one of claims 9 to 15 and 18 wherein it includes one or more frangible posts comprising:

a first member substantially orthogonally connected to a second member,

5 wherein the at least one first member has a region of weakness.

20. A method of constructing a guardrail including the steps of:

installing a plurality of support posts,

slidably interconnecting a plurality of rails and mounting them directly or indirectly to said posts,

10 fixing at least one end of at least one cable to the ground, and

positioning an impact head according to any one of claims 1 to 8 and 17 at one end of the slidably interconnected rails and threading at least one cable through it.

21. An impact head according to claim 1 substantially as herein described with
15 reference to any one of the accompanying drawings thereof.

22. An impact head according to any one of claims 1 to 8 and 17 substantially as herein described.

23. A guardrail according to claim 9 or claim 12 substantially as herein described with reference to any one of the accompanying drawings thereof.

20 24. A guardrail according to any one of claims 9 to 15, 18 and 19 substantially as herein described.

25. A frangible fastener according to claim 16 substantially as herein described with reference to any one of the accompanying drawings thereof.

26. A frangible fastener according to claim 16 substantially as herein described.

27 A method according to claim 20 substantially as herein described with reference to any one of the accompanying drawings thereof.

28. A method according to claim 20 substantially as herein described.